## (19) World Intellectual Property Organization International Bureau

national Bureau





(43) International Publication Date 29 September 2005 (29.09.2005)

**PCT** 

(10) International Publication Number WO 2005/089082 A2

(51) International Patent Classification7: Not classified

(21) International Application Number:

PCT/SE2005/000429

(22) International Filing Date: 23 March 2005 (23.03.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 0400662-3

24 March 2004 (24.03.2004) SI

- (71) Applicant (for all designated States except US): AMIC AB [SE/SE]; Uppsala Science Park, S-751 83 Uppsala (SE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BERGMAN, David [SE/SE]; Salagatan 5B, S-753 30 Uppsala (SE). MENDEL-HARTVIG, Ib [SE/SE]; Rabeniusvägen 28, S-756 55 Uppsala (SE). UHRBERG, Simon [SE/SE]; Eksätravägen 27, S-756 55 Uppsala (SE).
- (74) Agent: BERGENSTRÅHLE & LINDVALL AB; P.O. Box 17704, S-118 93 Stockholm (SE).

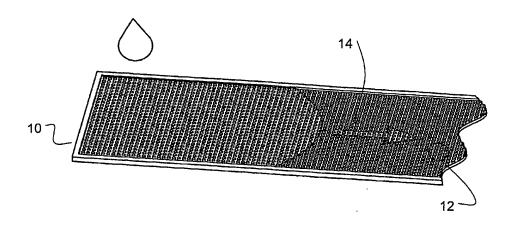
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

 without international search report and to be republished upon receipt of that report

[Continued on next page]

(54) Title: ASSAY DEVICE AND METHOD



(57) Abstract: A device and method for the separation of a component in a liquid sample prior to the detection of an analyte in said sample, wherein a sample is added to a receiving zone on a substrate, said substrate further optionally comprising a reaction zone, a transport or incubation zone connecting the receiving and reaction zone, respectively, forming a flow path on a substrate, wherein said substrate is a non-porous substrate, and at least part of said flow path consists of areas of projections substantially vertical to said surface, and having a height (H), diameter (D) and reciprocal spacing (t1, t2) such, that lateral capillary flow of said liquid sample in said zone is achieved, and where means for separation are provided adjacent to the zone for receiving the sample. Said means for separation are chosen among filter means, optionally enhanced by affinity binding and/or aggregation; magnetic means, also optionally enhanced by affinity binding and/or aggregation; and acoustic means.

VO 2005/089082 A2



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.